INDEX TO VOLUME LVII

ACTION currents in phrenic nerve, 1.

Alcoholic fermentation, nature of, 454. Alkaloids, effect of, on oviducal secretions, 275.

Arbacia eggs, sensitization of, 110.

Artificial extrapause of frog's ventricle, 179.

ATKINSON, H. V. See McGuigan and ATKINSON, 95.

BARBOUR, H. G. and B. P. FREED-MAN. Effects of pilocarpine upon salivary secretion in normal and febrile dogs, 387.

Baskervill, M. L. See Lillie and Baskervill, 110.

BAUMANN, E. J. See Marine and BAUMANN, 135.

Behre, E. H. See Riddle and Behre, 228.

Blood gases, influence of medullary blood flow on, 104.

— pressure after transection of spinal cord, 68.

Brain stem, studies on, 218.

CALCIUM salts and reproductive secretions, 264.

Carbon dioxide excretion after destruction of the optic thalamus, 218.

Carlson, A. J. and A. B. Luckhardt. Studies on the visceral sensory nervous system. X. The vagus control of the esophagus, 299.

Catalase a measure of metabolic activity, 125.

Coagulation factors in uterine mucosa, 444.

—, rôle of tissue fibrinogen in, 395. COOMBS H. C. See HASTINGS, COOMBS and PIKE, 104. COWGILL, G. R. A contribution to the study of the relation between vitamin-B and the nutrition of the dog, 420.

DAWSON, P. M. See OSTLUND, HODGES and DAWSON, 470.

DE BOER, S. On the artificial extrapause of the ventricle of the frog's heart, 179.

—. Researches on the rhythm and metabolism of the bled frog's heart, 189.

Diaphragm muscle, types of oscillations in, 171.

DUTCHER, R. A. and S. D. WILKINS. Vitamine studies. VII. The influence of fresh alfalfa upon the weight of testes in single comb white Leghorn cockerels, 437.

EGG shells, inadequate, and death of embryos, 250.

Embryos, death of, inadequate egg shells and, 250.

Enzymes, diffusion of food substances and, 478.

Esophagus, vagus control of, 299.

FERMENTATION, alcoholic, nature of, 454.

Fertility and sex, relation of stale sperm to, 228.

Fever, salivary secretion in, 387.

Fibrinogen, tissue, rôle of, in coagulation, 395.

Finks, A. J. and C. O. Johns. Studies in nutrition. IX. The nutritive value of the proteins from the Chinese and Georgia velvet beans, 61. Food substances and enzymes, diffusion of, 478.

Freedman, B. P. See Barbour and Freedman, 387.

Fulton, J. F., Jr. Studies on neuromuscular transmission. I. The action of novocaine on muscle nuclei, 153.

GASSER H. S. and H. S. Newcomer.
Physiological action currents in
the phrenic nerve. An application
of the thermionic vacuum tube to
nerve physiology, 1.

Growth, testicular, effect of alfalfa feeding on, 437.

Guest, G. M. See Mills and Guest, 395.

HANKE, M. C. E. See RIDDLE and HANKE, 264.

Hastings, A. B., H. C. Coombs and F. H. Pike. The changes in the concentration of the carbon dioxide resulting from changes in the volume of blood flowing through the medulla oblongata, 104.

Heart, frog's, rhythm and metabolism of, 189.

—, output of, in dogs, 27.

Heat-block of sensory fibers in sciatic nerve, 470.

Hemorrhage, effect of, on sympathetic nerves, 95.

Hodges, P. C. See Ostlund, Hodges and Dawson, 470.

INTRACELLULAR respiration, quantitative studies on, 336.

Ivy, A. C. and Y. OYAMA. Studies on the secretion of the pars pylorica gastri, 51.

JOHNS, C. O. See Finks and Johns, 61.

KING, C. V. SEE RIDDLE and KING,

King, J. L. A study of the anticoagulating substances in the mucous membrane of the uterus, 444.

KNC, nature of action of, on Paramecium and Planaria, 336.

LILLIE, R. S. and M. L. BASKERVILL.

The action of neutral isotonic salt solutions in sensitizing Arbacia eggs to the activating influence of hypertonic sea-water, 110.

Luckhardt, A. B. See Carlson and Luckhardt, 299.

LUND, E. J. Quantitative studies on intracellular respiration. V. The nature of the action of KNC on Parameeium and Planaria, with an experimental test of criticism, and certain explanations offered by Child and others, 336.

McGUIGAN, H. and H. V. Atkinson.

The effect of hemorrhage on the sympathetic nerves, 95.

Macarthur, J. W. Gradients of vital staining and susceptibility in Planaria and other forms, 350.

Marine, D. and E. J. Baumann. Influence of glands with internal secretion on the respiratory exchange.

II. Effect of suprarenal insufficiency (by removal or by freezing) in rabbits, 135.

Medullary blood flow, influence of, on blood gases, 104.

Metabolic activity, is catalase a measure of, 125.

MILLS, C. A. and G. M. GUEST. The rôle of tissue fibringen (thrombokinase) in fibrin formation and normal elotting, 395.

Morgulis, S. Is catalase a measure of metabolic activity?, 125.

Muscle, diaphragm, types of oscillations in, 171.

— nuclei, action of novocaine on,

INDEX

- Mucosa, uterine, coagulation factors in, 444.
- NEILL, A. J. A comparison of the rate of diffusion of certain substances, particularly the food materials, enzymes and pro-enzymes, 478.
- See NICE and NEILL, 171.
- Nerve, phrenic, action currents in, 1.

 sciatic, heat-block of sensory
- fibers in, 470. Nerves, sympathetic, effect of hemor-
- Nerves, sympathetic, effect of hemorrhage on, 95.
- Nervous system, visceral sensory, 299.Neuromuscular transmission, studies on, 153.
- Newcomer, H. S. See Gasser and Newcomer, 1.
- NICE, L. B. and A. J. NEILL. Types of oscillations in diaphragm muscle, 171.
- Novocaine, action of, on muscle nuclei, 153.
- Nutrition of the dog, vitamin-B and, 420.
- ----, studies in, 61.
- OSTLUND, E. O., P. C. Hodges and P. M. Dawson. Heat-block of sensory fibers in the sciatic nerve, 470.
- Oviducal secretions, effect of alkaloids on, 275.
- OYAMA, Y. See Ivy and OYAMA, 51.
- PARAMECIUM and Planaria, nature of action of KNC on, 336.
- PIKE, F. H. See Hastings, Coombs and PIKE, 104.
- Planaria, Paramecium and, nature of action of KNC on, 336.
- Prewitt, P. V. Comparative studies of the early reactions in spinal cats produced by various methods, 291.
- Proteins from Chinese and Georgia velvet beans, nutritive value of, 61.

- REACTIONS, early, in spinal cats,
- Reproduction in birds, physiology of, 228, 250, 264, 275.
- Reproductive secretions, calcium salts and, 264.
- Respiration, intracellular, quantitative studies on, 336.
- Respiratory exchange, suprarenal insufficiency and, 135.
- Riddle, O. Studies on the physiology of reproduction in birds. X. Inadequate egg shells and the early death of embryos in the egg, 250.
- and E. H. Behre. Studies on the physiology of reproduction in birds. IX. On the relation of stale sperm to fertility and sex in ringdoves, 228.
- and M. C. E. Hanke. Studies on the physiology of reproduction in birds. XI. Effects of feeding soluble calcium salts upon reproductive secretions and upon the total inorganic constituents of the egg shell, 264.
- and C. V. King. Studies on the physiology of reproduction in birds. XII. The relation of nerve stimuli to oviducal secretions as indicated by effects of atropine and other alkaloids, 275.
- Rogers, F. T. and S. D. Wheat. Studies on the brain stem. V. Carbon dioxide exerction after destruction of the optic thalamus and the reflex functions of the thalamus in body temperature regulation, 218.
- SALIVARY secretion in fever, 387.
- Secretion of pars pylorica gastri, 51 Sensitization of Arbacia eggs, 110.
- Sensory nervous system, visceral, 299.
 Sex, fertility and, relation of stale sperm to, 228.
- Sperm, stale, relation of, to fertility and sex, 228.

Spinal cats, early reactions in, 291.

- cord, blood pressure after transection of, 68.

Staining and susceptibility gradients, 350.

STEWART, G. N. The output of the heart in dogs, 27.

Stomach, secretion of, 51.

Suprarenal insufficiency and respiratory exchange, 135.

TESTICULAR growth, effect of alfalfa feeding on, 437.

Thalamus, reflex functions of, in body temperature regulation, 218.

Tissue fibrinogen, rôle of, in coagulation, 395.

VAGUS control of the esophagus, 299.

Ventricle, frog's, artificial extrapause of, 179.

Visceral sensory nervous system, 299. Vitamin-B and nutrition of the dog, 420.

Vitamine studies, 437.

WARDEN, C. C. The nature of alcoholic fermentation, 454.

Wheat, S. D. See Rogers and Wheat, 218.

WILKINS, S. D. See DUTCHER and WILKINS, 437.

YATES, A. B. The mechanism of the recovery or maintenance of systemic blood pressure after complete transection of the spinal cord, 68.

